

REMARKS

Claims 1–31 are pending. Applicant respectfully requests reconsideration and allowance of the application.

Rejection under 35 U.S.C. 103 (Kram in view of Derfler and Alleged Admitted Prior Art)

Claims 1–7, 9–15, 17–22, 24–29, and 31 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,314,531 to Kram (hereinafter "Kram") in view of "How Networks Work" by Derfler (hereinafter "Derfler") and prior art that the Office Action alleged as being admitted to by Applicant (hereinafter "AAPA"). The Applicant respectfully traverses this rejection as the rejection fails to establish a prima facie case of obviousness, as set forth in MPEP §2143, which states, in part:

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

In particular, Kram discloses a system for testing and debugging distributed software systems by using network emulation. In particular, the system described by Kram tests software by modifying MAC to IP mapping tables of the emulation host computers to emulate network latency, packet corruption, packet shuffling, packet loss and network congestion. (See Kram, FIG. 2 and col. 4, line 62 to col. 5, line 17).

In section 3 of the "Response to Arguments" section of the Official Action, it is stated that the "Applicant has not presented a convincing argument that the failure created by Kram is not a physical failure". In response, the Applicant wishes to clarify

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that the language of Claims 1, 9, 17, 24, and 31 recites that the test control component is for selectively disabling the second network adapters to create failure of physical connections. Therefore, the Applicant respectfully disagrees with the assertion “what must be found is that the physical connection fails” and “for this to occur the connection must no longer be operative”.

Kram recites “the method and apparatus of the present invention emulate, in a controlled manner, network latency, transient and persistent communications outages” (see Kram, col. 3, lines 33–35). The Applicant wishes to clarify the distinction between creating a failure of physical connections and emulating a failure of physical connections. In creating a physical failure, the claimed subject matter physically removes the connection from the network, changing many properties of the network including, but not limited to, data flow properties. That is, the data which once flowed to the selectively disabled second network adapter no longer flows in the network. In contrast, because Kram may only emulate such a physical failure, data continues to flow to the still enabled network adapter of Kram and is then discarded or used in other manners by the emulator host of Kram that is still connected using a fully enabled and fully functioning network adapter.

More particularly, if the network data traffic between a physically disabled port (as in the presently claimed subject matter) and a source of the network data traffic were investigated, no network data traffic would be detected. However, if the network data traffic between an emulated disabled port (as in Kram) and a source of the network data traffic were investigated, all of the network data traffic would be detected. Therefore, Kram is not capable of creating the failure of physical connections using emulation.

Claim 1, 9, 17, 24 and 31: Rejection Incomplete; All Features Not Addressed

As noted in In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970), “[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art.” The rejection of claim 1 does not consider or address all of the words in claim 1, 9, 17, 24, and 31.

Claim 1 recites “a plurality of second network adapters”, and a “test control component for selectively disabling the second network adapters to create failure of physical connections between the second network adapters and the respective network adapters.” Kram recites an “emulator host” (*see* Kram, col. 6, lines 9–11, “several possible positions for the emulator host are depicted (E1, E2, E3) in FIG. 3”). Kram does not recite Kram further recites that the “emulator host must be positioned such that it has a directly connected network interface to all subnets which contain test computers” (*see* Kram, col. 6, lines 11–13). Therefore, the “emulator host” of Kram is neither recited nor depicted in FIG. 3 as having a plurality of second network adapters. That is, the emulator host is described as functioning only when having a directly connected network interface to all subnets which contain test computers. Therefore, as Kram does not either depict or disclose a plurality of second network adapters, Kram is not capable of selectively disabling the second network adapters. Further, as Kram does not depict or disclose a plurality of second network adapters, Kram may not depict or disclose a test component including a plurality of second network adapters.

The rejection further asserts that “Kram fails to explicitly teach the tested element being a switch between an external network and a private network”, and the Applicant agrees with the assertion. However, the Applicant respectfully disagrees that there is any suggestion or motivation to modify Kram in view of Derfler. Rather, Kram teaches away from the modification of Derfler, stating, “the technique of manipulating MAC to IP address mapping only works within the scope of subnets because routers, which partition subnets, ignore MAC addresses and redirect traffic based on IP addresses.” That is, the assertion that Kram may be modified with “switching between

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LANs and WANs” as recited by Derfler is incorrect as Kram is explicit regarding the requirement of the “emulation host” only functioning within a subnet behind a router.

Kram in view of Derfler is further modified by the alleged “AAPA” with the assertion “private networks are well known in server networks for the Internet” and “these networks must be connected to public networks from which users may access the information on the private networks.” The Applicant wishes to maintain the Applicant’s assertion that any prior art has been admitted. However, for the purposes of furthering prosecution, the Applicant will address the rejection. As is in the knowledge generally available to one of ordinary skill in the art, a public and private network may be connected; however, all of the data within a private network may not be available to the public network. For example, private information within the private network may be inaccessible to users on a public network. See Derfler, page 145, second paragraph, “organizations with busy networks can use network portal devices called bridges that link workgroup LANs while exercising discrimination over the traffic passing between them.” Therefore, the mere inclusion of Derfler does not advance the argument of the rejection.

In section 16, it is further asserted that “Kram does not explicitly call the creation persistent connection failures the ‘creation of failures of physical connections’”, and the Applicant agrees with this assertion. However, the rejection asserts U.S. Patent 5,862,362 to Somasegar (hereafter “Somasegar”) teaches “that to create failures of physical connections normally caused by unplugging the connection is accomplished by using substitute handler systems” and that this creation of failures “effectively cut off the sending and receiving of data”. The Applicant respectfully disagrees with the assertion in that the explicit words “create” or “creation” occurs explicitly in combination with the explicit words “physical connections” in the cited section of Somasegar.

Furthermore, Somasegar recites “the present invention is a test tool for simulating a network failure under software control” (*see* Somasegar, col. 1, lines 35–36). As discussed earlier, a simulated failure is not equivalent to physically creating a network failure. More particularly, network data continues to flow in such a simulated network failure. Somasegar recites that “these substitute handler functions operate to intercept data being sent to or received from the network”. That is, the data still flows to the physical port and the data remains present in the network, in contrast to the presently claimed subject matter. Somasegar further states “the substitute handler then returns a status datum to its caller indicating successful sending or receiving of the data but does not actually send or receive the data.”

If the rejection is asserting that Somasegar stops the flow of data, the Applicant respectfully disagrees, however, for the purposes of advancing prosecution the Applicant will argue against this assertion. Even if Somasegar were able to stop the flow of data, which it is not as the data is intercepted; Somasegar must still send additional data across the still physically functioning network port to return the “status datum”. Therefore, network data continues to flow across the emulated network failure and a physical failure has not been created.

In addition, there is no suggestion in either of Kram, Derfler, or the alleged AAPA to modify the combination of these references with the teachings of Somasegar. As the rejection admits, the purpose of modifying Kram in view of Somasegar is to solve the problem of the rejection’s argument that “Kram does not explicitly call the creation persistent connection failures the ‘creation of failures of physical connections’”. That is, Kram does not suggest or include any motivation of including the language of “creation of failures of physical connections” and such a combination is made merely for the purposes of furthering the arguments of the rejection.

Furthermore, the rejection admits that the “substitute handler system” of Somasegar is equivalent to “substitute handler systems such as the one described by Kram”. Therefore, as Kram already includes a substitute handler system, Kram would not be motivated to include a second redundant equivalent substitute handler system.

Therefore, there is no suggestion or motivation, either in Kram, Derfler, the alleged AAPA, or Somasegar to modify these references or to combine the teachings of the cited references. The Applicant respectfully requests that the rejection to Claims 1, 9, 17, 24, and 31 under 35 U.S.C. § 103(a) be reconsidered and withdrawn. Claims 2–8 depend from Claim 1, Claims 10–16 depend from Claim 9, Claims 18–23 depend from Claim 17, and Claims 25–30 depend from Claim 24, and are patentable over the cited prior art for at least the same reasons as discussed with respect to Claims 1, 9, 17, 24, and 31.

Conclusion

In view of the above amendment and remarks it is submitted that the claims are patentably distinct over the cited references and that all the rejections to the claims have been overcome. Reconsideration of the above Application is requested. Based on the foregoing, Applicants respectfully requests that the pending claims be allowed, and that a timely Notice of Allowance be issued in this case. If the Examiner believes, after this response, that the application is not in condition for allowance, the Examiner is requested to call the Applicant’s attorney at the telephone number listed below.

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Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee that is not covered by the enclosed fee transmittal, please charge any deficiency to Deposit Account No. 50-0463.

Respectfully submitted,

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Date: August 24, 2006

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